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**Substitute for form 1449/PTO**

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

*(Use as many sheets as necessary)*

Sheet 1 of 2

<b>Complete if Known</b>	
Application Number	10/719,903
Filing Date	November 21, 2003
First Named Inventor	John Santhoff et al.
Art Unit	2681
Examiner Name	to be assigned
Attorney Docket Number	051-15

**U. S. PATENT DOCUMENTS**

## FOREIGN PATENT DOCUMENTS

Examiner  
Signature

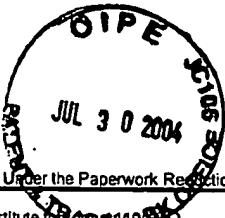
Date  
Considered

7/5/2005

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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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<b>Sheet</b>	2	<b>of</b>	2
		<b>Attorney Docket Number</b>	

## NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
mV0		5. NOAM GERI, Hybrid Coax-Wireless Multimedia Home Networks Using 802.11 Technology, Texas Instruments, White Paper, March 2003, 7 pages.	

Examiner Signature		Date Considered	7/5/2005
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Substitute for form 1449A/PTO		<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>		Application Number	To be assigned
		Filing Date	November 21, 2003
		First Named Inventor	John H. SANTHOFF et al.
		Art Unit	To be assigned
		Examiner Name	To be assigned
		Attorney Docket Number	30287-15
Sheet	1	of	4

## U.S. PATENT DOCUMENTS

Examiner Initials	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
AVO		US- 3,678,204	07/18/1972	HARMUTH	
		US- 3,728,632	04/17/1973	ROSS	
		US- 4,447,747	05/08/1984	LAPOTIN	
		US- 4,641,317	02/03/1987	FULLERTON	
		US- 4,782,324	11/01/1988	UNDERWOOD	
		US- 4,979,186	12/18/1990	FULLERTON	
		US- 5,115,409	05/19/1992	STEPP	
		US- 5,146,616	09/08/1992	TANG ET AL.	
		US- 5,157,559	10/20/1992	GLEASON ET AL.	
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		US- 5,574,755	11/12/1996	PERSICO	
		US- 5,587,687	12/24/1996	ADAMS	
		US- 5,635,863	06/03/1997	PRICE, JR.	
		US- 5,677,927	10/14/1997	FULLERTON ET AL.	
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		US- 5,708,377	01/13/1998	BRADLEY	
		US- 5,714,954	02/03/1998	CHUNG ET AL.	
AVO		US- 5,768,700	06/16/1998	KARDONITCHIK	

## FOREIGN PATENT DOCUMENTS

Examiner Signature	<i>nguyen</i>	Date Considered	7/5/2005
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		Filing Date	November 21, 2003
		First Named Inventor	John H. SANTHOFF et al.
		Art Unit	To be assigned
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Sheet	2	of	4
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		Number-Kind Code <sup>2</sup> (if known)			
WJD		US- 5,847,623	12/08/1998	HADJICHRISTOS	
		US- 5,872,446	02/16/1999	CRANFORD, JR. ET AL.	
		US- 5,900,747	05/04/1999	BRAUNS	
		US- 5,986,501	11/16/1999	RAFATI ET AL.	
		US- 6,026,125	02/15/2000	LARRICK, JR. ET AL.	
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		US- 6,054,889	04/25/2000	KOBAYASHI	
		US- 6,061,551	05/09/2000	SORRELLS ET AL.	
		US- 6,078,277	06/20/2000	CHENG ET AL.	
		US- 6,087,871	07/11/2000	KARDO-SYSSOEV ET AL.	
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		US- 6,178,217 B1	01/23/2001	DEFRIES ET AL.	
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		US- 6,351,652 B1	02/26/2002	FINN ET AL.	
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		US- 6,539,213 B1	03/25/2003	RICHARDS ET AL.	
		US- 6,580,902 B1	06/17/2003	SORRELLS ET AL.	
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## FOREIGN PATENT DOCUMENTS

Examiner Signature	nguyen	Date Considered	7/5/2005
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		Filing Date	November 21, 2003
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		Art Unit	To be assigned
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Sheet	3	of	4
		Attorney Docket Number	

## U.S. PATENT DOCUMENTS

## FOREIGN PATENT DOCUMENTS

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>			
(use as many sheets as necessary)			
Sheet	4	of	4
		Application Number To be assigned	
		Filing Date November 21, 2003	
		First Named Inventor John H. SANTHOFF et al.	
		Group Art Unit To be assigned	
		Examiner Name To be assigned	
		Attorney Docket Number 30287-15	

## OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue numbers, publisher, city and/or country where published	T <sup>2</sup>
2V0		FERNANDO RAMIREZ-MIRELES, "On Performance of Ultra Wideband Signals in Gaussian Noise and Dense Multipath," Paper 99C265, Accepted for Publication in the IEEE Transactions on Vehicular Technology, Pages 1-9.	
2V0		FERNANDO RAMIREZ-MIRELES et al., "N-Orthogonal Time-Shift-Modulated Codes for Impulse Radio," Communication Sciences Institute, Department of Electrical Engineering-Systems, University of Southern California, Los Angeles, CA 90089-2565 USA, Pages 1-4.	
2V0		HENNING F. HARMUTH, "Frequency-Sharing and Spread-Spectrum Transmission with Large Relative Bandwidth," IEEE Transactions on Electromagnetic Compatibility, Vol. EMC-20, No. 1, February 1978, Pages 232-239.	
2V0		HENNING F. HARMUTH, "Applications of Walsh functions in communications," IEEE Spectrum, November 1969, Pages 82-91.	
2V0		AETHER WIRE & LOCATION, INC., ROBERT FLEMING et al., "Integrated, Low-Power, Ultra-Wideband Transceivers for Distributed Position Location and Communication," Technical Abstracts of Proposal to Defense Advanced Research Projects Agency (DARPA), Part I - Technical Proposal, 1998, Pages 1-52.	
2V0		AETHER WIRE & LOCATION, INC., ROBERT FLEMING et al., "Low-Power, Miniature, Distributed Position Location and Communication Devices Using Ultra-Wideband, Nonsinusoidal Communication Technology," Semi-Annual Technical Report Prepared for: ARPA/FBI, July 1995, Pages 1-40.	

Examiner Signature	Nguyen, V	Date Considered	7/15/2005
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